

An investigation of the prime numbers
in the harmonic series between
the thirty-second and sixty-fourth partials
centered on a fundamental of D# at 19.45 Hz

For 7 players or multiples thereof (14, 21, etc.).

Each player is given one pitch from the top staff to play throughout. All pitches must be used.

Each note has the deviation from the equal-tempered system listed above the note. If nothing is listed there is no deviation.

The partial number and frequency (in hertz) of each note is listed below the note.

Each instrument must be capable of accurately reproducing their pitch. Electronic tuners may be necessary to achieve the intonation accuracy required.

Fixed pitch instruments should not be used.

In addition to their given pitch from the top staff, players may also freely play both pitches from the bottom staff.

Notes are sustained for a normal breath or bow length (approx. 15 - 30 sec.).

Notes should fade in and fade out as cleanly as possible.

The general dynamic level is forte.

Players are not to play continuously but should investigate the different sound combinations and listen to those around them.

Duration of the piece is open but should be determined beforehand.

The musical notation consists of two staves. The top staff contains seven measures, each with a whole note. Above each note is a deviation value, and below each note are the partial number and frequency in Hz. The bottom staff contains two measures, each with a whole note. Above each note is a sharp sign, and below each note are the partial number and frequency in Hz.

| Partial | Frequency (Hz) | Deviation |
|---------|----------------|-----------|
| 37 | 719.65 | -49 |
| 41 | 797.45 | +29 |
| 43 | 836.35 | +12 |
| 47 | 914.15 | -35 |
| 53 | 1030.85 | -33 |
| 59 | 1147.55 | -41 |
| 61 | 1174.66 | +17 |
| 32 | 622.4 | |
| 64 | 1244.8 | |